

INEL NEWS

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First of its kind disposal technology ushers last of 46 TMI-2 prefilters to Washington

DOE, GPU, NRC and EPRI in March 1980 signed a "coordination agreement" on a TMI-2 information and examination program. The disposal of the prefilters was part of a larger objective to develop technical information for regulation and operation and the development and testing of new technology of potential industry-wide application in radioactive waste processing and disposal methods and systems.

The last of 46 TMI-2 EPICOR prefilters was shipped to its final destination Feb. 13, 1985. The shipping of the prefilter marked the end of a one-year campaign in which EG&G Idaho personnel readied the prefilters for disposal at the U.S. Ecology commercial disposal site in Washington.

The prefilters came from the cleanup of 560,000 gallons of water spilled during the accident at TMI-2.

Government and the private sector joined together for the successful and expeditious completion of the project using a first of its kind disposal technology, states John McConnell, TMI Programs Waste Group supervisor. The Department of Energy, Nuclear Regulatory Commission, state of Washington, GPU Nuclear, U.S. Ecology, Nuclear Packaging

and EG&G Idaho were the key players in the project, that was completed three and one-half months ahead of schedule.

Though classified as low-level waste, the prefilters required certain processing measures before disposal because of their "high specific activity." They were stored in the TAN 607 Hot Shop where they were remotely examined, processed, individually placed and permanently sealed in specially-made High Integrity Containers (HICs), finally being transported in a large shipping cask to Washington.

During the year, quick and innovative measures often were called on to solve abnormal situations, says McConnell. Solutions were always found, however, as personnel from the Nuclear Materials Evaluation Operations Branch, TMI Fuel and Waste Handling Branch, Traffic and Receiving Branch, Health and Safety Division and Engineering Division were able to contend with some rather unusual constraints.

'This disposal campaign completes a major DOE milestone for DOE involvement in the TMI cleanup and also completes a commitment to the state of Idaho to effect disposition of the EPICOR prefilters brought to Idaho from TMI for research and ultimate disposal.

—Dick Schmitt, branch manager, TMI-2 Fuel and Waste Handling



WEDNESDAY, FEB. 13, the last EPICOR prefilter, at the INEL for pre-disposal processing, was shipped to a permanent disposal site. At the TAN 607 Hot Shop for the send-off were (left to right) Alan Yeazel (DOE-ID), Dave McGoff (DOE-ID), John McConnell (EG&G Idaho), Willis Young (DOE-ID) and Larry Croft (EG&G Idaho). (Photo by Ricardo Romero, EG&G Idaho.)

For example, the prefilters were shipped on a Cask and Transporter truck that, because of state regulations, was allowed to travel only during weekdays and never on holiday weekends. Hence, the travel times had to be scheduled accordingly.

Weather conditions also had to be considered. The Hot Shop doors, for example, cannot be opened if winds are blowing more than 15 mph or the temperature is below minus 10 degrees Fahrenheit. (The winds could possibly blow some contamination around; the low temperatures could cause the Hot Shop windows to break from thermal shock.)

"We contended with a number of problems," comments McConnell. "But this was still a highly productive effort, and more efficient than anticipated even though we ran into problems that caused us to have to design new equipment on the spot, and many times be quite innovative."

While the 46th prefilter was the last to be shipped in this particular project, there are still four prefilters at the INEL being studied for NRC research purposes. These will be disposed of in the same type HICs within the next several years.